GROUP CHARACTERISTICS OF SOME NORTH AMERICAN BUT-TERFLIES — III.

BY SAMUEL H. SCUDDER, CAMBRIDGE, MASS.

Tasitia Moore.

Chrysalis: Slenderer in the thoracic region than in Anosia with stouter and more prominent ocellar tubercles, and with the semicircles of raised points on third abdominal segment oblique when pendent.

T. berenice Cram. (Pap. gilippus Sm.-Abb.). Butterfly: Wings dark reddish chocolate on both surfaces broadly bordered with blackish, the veins darker especially beneath where they are often narrowly edged with white or, above, with steel gray; the black border more or less dotted with white and on the fore wings followed within by a row of white spots, besides which two parallel oblique rows of white spots cross the apical half of the wing, the inner just outside the cell, and similar spots are found in the middle of the median interspaces of the same wings. Expanse of wings 80 mm. Egg: Unknown. Caterpillar at birth: Unknown. Mature caterpillar: Whitish violet with transverse deeper lines, and next the anterior margins of the segments a transverse reddish brown band enclosing a narrow yellow stripe; filaments brown purple. Length 55 mm. Feeds on Asclepias amplexicaulis, A. obtusifolia, Gonolobus hirsutus. Chrysalis: Delicate green, the raised points golden, those of the third abdominal segment black on the anterior face set in a blue band. Length 22 mm.-Southernmost United States, as far west as New Mexico and Arizona.

T. strigosa Bates. Butterfly: Differs from the preceding, of which it may be only a geographical race, principally in the slightly lighter ground color and the considerably larger size of the round white spots crossing the apical half of the fore wing, not including those upon or next the marginal black band; the black veins of the under side of the hind wings are also more widely margined with a white flecking. Expanse of wings 70 mm. Early stages unknown.—Texas.

Tribe ITHOMYINI.

Butterfly: Males provided in most (all?) genera with an erect row of odoriferous hairs along the subcostal nervure of the hind wings, but no pockets or patches of androconia. Females with relatively long and not enlarged fore tarsi. Egg: (Not known sufficiently to distinguish them from Limnaini.) Caterpillar at birth: The body segments provided with no other elevations than those on which the ranged bristles are seated. Mature caterpillar: Body furnished with fleshy short and stout appendages and also with small papillae; markings transverse and longitudinal. Feeds on Solanaceae. Chrysalis: Not dorsally tunid on abdomen, the mesothorax unusually prominent.

Synopsis of the genera.

1. DYNOTHEA. Butterfly: Last joint of palpi minute. Fore wings opaque, less than twice as long as broad. Egg: Unknown. Caterpillar at birth: Ranged appendages short, slightly bent, continuing into the second stage. Mature

caterpillar: Naked and without appendages (?). Chrysalis: Plump, with strongly protuberant wing-cases and mesonotum.

- 2. MECHANITIS. Butterfly: Last joint of palpi minute. Fore wings opaque, much more than twice as long as broad. Egg: Imperfectly known; laid in clusters. Caterpillar at birth: Ranged appendages moderately long, pointed, not restricted to first stage. Mature caterpillar: Furnished with a series of thick fleshy appendages on the lower sides of the body. Chrysalis: Elongate with somewhat protuberant mesonotum and scarcely protuberant wing-cases.
- 3. DIRCENNA. Butterfly: Last joint of palpi conspicuous. Fore wings transparent, much more than twice as long as broad. Egg: Unknown. Caterfillar at birth: Ranged appendages long, slightly bent, restricted to first stage. Mature caterfillar: Covered with pile. Chrysalis: Similar to that of Dynothea.

Two species of Hymenitis have been credited to our southern border, but probably on insufficient grounds: diaphana, said to occur "from Brazil to Virginia"; and phono given by Geyer as from Florida; neither assertion has been verified.

Dynothea Reakirt.

Butterfly: Palpi thinly clothed, with

first and second joints subequal and long, third very short; antennae half as long as fore wings. Wings opaque: fore wings less than twice as long as broad. the recurrent nervule in discoidal cell originating between the two lower subcostal nervules. Femur of male longer than the coxa, Egg: Unknown, Caterpillar at birth: Ranged appendages shorter than in the other genera, slightly bent, continuing into the second stage. Mature caterpillar: Naked and without appendages (?), with a stigmatal band. Chrysalis: The wing-cases are strongly protuberant along the ventral line and the mesonotum similarly protuberant along the dorsal, in each case roundly rectangulate; and thereby, as seen on a side view, the anterior end of the body is bent at an angle of nearly 80°; abdomen short conical.

D. lycaste Fabr. (Ceratinia iphianassa Doubl. etc.). Butterfty: Wings tawny orange, with similar markings above and beneath. Fore wings mostly blackish outside the discoidal cell and interspace beneath it, with a large oblique long squarish black spot in the cell, large unequal oval orange spots in the median interspaces and a large oblique broad saffron band nearly crossing the apical half of the wing. Hind wings margined with a narrow lunulate black band; an equally broad black loop open on the inner margin crosses the wing enclosing subapically a small black spot at the apex of the cell. Expanse 50 mm. Early stages: Unknown. - Southern California.